Chapter 2. General Control

Section 1. General

2-1-1. ATC SERVICE

The primary purpose of the ATC system is to prevent a collision between aircraft operating in the system and to organize and expedite the flow of traffic. In addition to its primary function, the ATC system has the capability to provide (with certain limitations) additional services. The ability to provide additional services is limited by many factors, such as the volume of traffic, frequency congestion, quality of radar, controller workload, higher priority duties, and the pure physical inability to scan and detect those situations that fall in this category. It is recognized that these services cannot be provided in cases in which the provision of services is precluded by the above factors. Consistent with the aforementioned conditions, controllers shall provide additional service procedures to the extent permitted by higher priority duties and other circumstances. The provision of additional services is not optional on the part of the controller, but rather is required when the work situation permits. Provide air traffic control service in accordance with the procedures and minima in this order except when:

a. A deviation is necessary to conform with ICAO Documents, National Rules of the Air, or special agreements where the U.S. provides air traffic control service in airspace outside the U.S. and its possessions or:

NOTE-
Pilots are required to abide by CFR's or other applicable regulations regardless of the application of any procedure or minima in this order.

b. Other procedures/minima are prescribed in a letter of agreement, FAA directive, or a military document, or:

NOTE-
These procedures may include altitude reservations, air refueling, fighter interceptor operations, law enforcement, etc.

REFERENCE-
FAAO 7110.65, Procedural Letters of Agreement, Para 1-1-8.

c. A deviation is necessary to assist an aircraft when an emergency has been declared.

REFERENCE-
FAAO 7110.65, Safety Alert, Para 2-1-6.
FAAO 7110.65, Emergencies, Chapter 10
FAAO 7110.65, Merging Target Procedures, Para 5-1-8.

2-1-2. DUTY PRIORITY

a. Give first priority to separating aircraft and issuing safety alerts as required in this order. Good judgment shall be used in prioritizing all other provisions of this order based on the requirements of the situation at hand.

REFERENCE-
FAAO 7110.65, Safety Alert, Para 2-1-6.

NOTE-
Because there are many variables involved, it is virtually impossible to develop a standard list of duty priorities that would apply uniformly to every conceivable situation. Each set of circumstances must be evaluated on its own merit, and when more than one action is required, controllers shall exercise their best judgment based on the facts and circumstances known to them. That action which is most critical from a safety standpoint is performed first.

b. Provide additional services to the extent possible, contingent only upon higher priority duties and other factors including limitations of radar, volume of traffic, frequency congestion, and workload.

2-1-3. PROCEDURAL PREFERENCE

a. Use automation procedures in preference to nonautomation procedures when workload, communications, and equipment capabilities permit.

b. Use radar separation in preference to nonradar separation when it will be to an operational advantage and workload, communications, and equipment permit.

c. Use nonradar separation in preference to radar separation when the situation dictates that an operational advantage will be gained.

NOTE-
One situation may be where vertical separation would preclude excessive vectoring.

2-1-4. OPERATIONAL PRIORITY

Provide air traffic control service to aircraft on a "first come, first served" basis as circumstances permit, except the following:

NOTE-
It is solely the pilot's prerogative to cancel an IFR flight plan. However, a pilot's retention of an IFR flight plan does not afford priority over VFR aircraft. For example, this does not preclude the requirement for the pilot of an arriving IFR aircraft to adjust his/her flight path, as necessary, to enter a traffic pattern in sequence with arriving VFR aircraft.

a. An aircraft in distress has the right of way over all other air traffic.

REFERENCE-
14 CFR Section 91.113(c).

b. Provide priority to civilian air ambulance flights "LIFEGUARD." Air carrier/taxi usage of the "LIFEGUARD" call sign, indicates that operational priority is requested. When verbally requested, provide priority to military air evacuation flights (AIR EVAC, MED EVAC) and scheduled air carrier/air taxi flights. Assist the pilots of air ambulance/evacuation aircraft to avoid areas of significant weather and turbulent conditions. When requested by a pilot, provide notifications to expedite ground handling of patients, vital organs, or urgently needed medical materials.

c. Provide maximum assistance to SAR aircraft performing a SAR mission.

REFERENCE-
FAAO 7110.65, Providing Assistance, Para 10-1-3.

d. Expedite the movement of presidential aircraft and entourage and any rescue support aircraft as well as related control messages when traffic conditions and communications facilities permit.

NOTE-
As used herein the terms presidential aircraft and entourage include aircraft and entourage of the President, Vice President, or other public figures when designated by the White House.

REFERENCE-
FAAO 7110.65, Aircraft Identification, Para 2-4-20.
FAAO 7210.3, Advance Coordination, Para 5-1-1.

e. Provide special handling, as required to expedite Flight Check aircraft.

NOTE-
It is recognized that unexpected wind conditions, weather, or heavy traffic flows may affect controller's ability to provide priority or special handling at the specific time requested.

REFERENCE-
FAAO 7110.65, Flight Check Aircraft, Para 9-1-3.

f. Expedite movement of NIGHT WATCH aircraft when NAOC (pronounced NA-YOCK) is indicated in the remarks section of the flight plan or in air/ground communications.

NOTE-
The term "NAOC" will not be a part of the call sign but may be used when the aircraft is airborne to indicate a request for special handling.

REFERENCE-
FAAO 7610.4, Applications, Para 12-1-1.

g. Provide expeditious handling for any civil or military aircraft using the code name "FLYNET."

REFERENCE-
FAAO 7110.65, FLYNET, Para 9-3-6.
FAAO 7610.4, "FLYNET" Flights, Nuclear Emergency Teams, Para 12-4-1.

h. Provide expeditious handling of aircraft using the code name "Garden Plot" only when CARF notifies you that such priority is authorized. Refer any questions regarding flight procedures to CARF for resolution.

NOTE-
Garden Plot flights require priority movement and are coordinated by the military with CARF. State authority will contact the Regional Administrator to arrange for priority of National Guard troop movements within a particular state.

i. Provide special handling for USAF aircraft engaged in aerial sampling missions using the code name "SAMP."

REFERENCE-
FAAO 7110.65, SAMP, Para 9-3-14.
FAAO 7210.3, Atmosphere Sampling For Nuclear Contamination, Para 5-3-4.
FAAO 7610.4, Atmospheric Sampling For Nuclear Contamination, Para 12-4-3.

j. Provide maximum assistance to expedite the movement of interceptor aircraft on active air defense missions until the unknown aircraft is identified.

k. Expedite movement of Special Air Mission aircraft when SCOOT is indicated in the remarks section of the flight plan or in air/ground communications.

NOTE-
The term "SCOOT" will not be part of the call sign but may be used when the aircraft is airborne to indicate a request for special handling.

REFERENCE-
FAAO 7110.65, Law Enforcement Operations by Civil and Military Organizations, Para 9-3-9.
FAAO 7610.4, Applications, Para 12-7-1.

l. When requested, provide priority handling to TEAL and NOAA mission aircraft.

NOTE-
Priority handling may be requested by the pilot, or via telephone from CARCAH or the 53rd Weather Reconnaissance Squadron (53WRS) operations center personnel, or in the remarks section of the flight plan.

REFERENCE-
FAAO 7110.65, Weather Reconnaissance Flights, Para 9-3-16.

m. IFR aircraft shall have priority over SVFR aircraft.

REFERENCE-
FAAO 7110.65, Chapter 7, Section 5, Special VFR (SVFR).

n. Providing priority and special handling to expedite the movement of OPEN SKIES observation and demonstration flights.

NOTE-
An OPEN SKIES aircraft has priority over all "regular" air traffic. "Regular" is defined as all aircraft traffic other than:

1. Emergencies.
2. Aircraft directly involved in presidential movement.
3. Forces or activities in actual combat.
4. Lifeguard, MED EVAC, AIR EVAC and active SAR missions.

REFERENCE-
FAAO 7110.65 OPEN SKIES Treaty Aircraft, Para 9-3-19.
FAAO 7210.3, OPEN SKIES Treaty Aircraft, Para 5-3-7.
Treaty on OPEN SKIES, Treaty Document, 102-37.

o. Aircraft operating under the National Route Program are not subject to route limiting restrictions (e.g., published preferred IFR routes, letter of agreement requirements, standard operating procedures).

REFERENCE-
FAAO 7110.65, En Route Data Entries, Para 2-3-2.
FAAO 7110.65, National Route Program (NRP) Information, Para 2-2-15.
FAAO 7110.65, Route or Altitude Amendments, Para 4-2-5.
FAAO 7210.3, Chapter 17, Section 17, National Route Program.

2-1-5. EXPEDITIOUS COMPLIANCE

a. Use the word "immediately" only when expeditious compliance is required to avoid an imminent situation.

b. Use the word "expedite" only when prompt compliance is required to avoid the development of an imminent situation. If an "expedite" climb or descent clearance is issued by ATC, and subsequently the altitude to maintain is changed or restated without an expedite instruction, the expedite instruction is canceled.

c. In either case, if time permits, include the reason for this action.

2-1-6. SAFETY ALERT

Issue a safety alert to an aircraft if you are aware the aircraft is in a position/attitude which, in your judgment, places it in unsafe proximity to terrain, obstructions, or other aircraft. Once the pilot informs you action is being taken to resolve the situation, you may discontinue the issuance of further alerts. Do not assume that because someone else has responsibility for the aircraft that the unsafe situation has been observed and the safety alert issued; inform the appropriate controller.

NOTE-
1. The issuance of a safety alert is a first priority (see para 2-1-2, Duty Priority) once the controller observes and recognizes a situation of unsafe aircraft proximity to terrain, obstacles, or other aircraft. Conditions, such as workload, traffic volume, the quality/limitations of the radar system, and the available lead time to react are factors in determining whether it is reasonable for the controller to observe and recognize such situations. While a controller cannot see immediately the development of every situation where a safety alert must be issued, the controller must remain vigilant for such situations and issue a safety alert when the situation is recognized.

2. Recognition of situations of unsafe proximity may result from MSAW/E-MSAW/LAAS, automatic altitude readouts, Conflict/Mode C Intruder Alert, observations on a PAR scope, or pilot reports.

3. Once the alert is issued, it is solely the pilot's prerogative to determine what course of action, if any, will be taken.

a. Terrain/Obstruction Alert. Immediately issue/initiate an alert to an aircraft if you are aware the aircraft is at an altitude which, in your judgment, places it in unsafe proximity to terrain/obstructions. Issue the alert as follows:

PHRASEOLOGY-
(Identification) LOW ALTITUDE ALERT,

CHECK YOUR ALTITUDE IMMEDIATELY.

THE (as appropriate) MEA/MVA/MOCA/MIA IN YOUR AREA IS (altitude),

or if an aircraft is past the final approach fix (nonprecision approach),

or the outer marker,

or the fix used in lieu of the outer marker (precision approach),

and, if known, issue

THE (as appropriate) MDA/DH IS (altitude).

b. Aircraft Conflict/Mode C Intruder Alert. Immediately issue/initiate an alert to an aircraft if you are aware of another aircraft at an altitude which you believe places them in unsafe proximity. If feasible, offer the pilot an alternate course of action.

c. When an alternate course of action is given, end the transmission with the word "immediately."

PHRASEOLOGY-
TRAFFIC ALERT (call sign) (position of aircraft) ADVISE YOU TURN LEFT/RIGHT (heading),

and/or

CLIMB/DESCEND (specific altitude if appropriate) IMMEDIATELY.

REFERENCE-
FAAO 7110.65, Conflict Alert (CA) and Mode C Intruder (MCI) Alert, Para 5-14-1.
FAAO 7110.65, En Route Minimum Safe Altitude Warning (E-MSAW), Para 5-14-2.
FAAO 7110.65, CA/MCI, Para 5-15-6.
FAAO 7110.65, Altitude Filters, Para 5-2-23.

2-1-7. INFLIGHT EQUIPMENT MALFUNCTIONS

a. When a pilot reports an inflight equipment malfunction, determine the nature and extent of any special handling desired.

NOTE-
Inflight equipment malfunctions include partial or complete failure of equipment which may affect either safety and/or the ability of the flight to proceed under IFR in the ATC system. Controllers may expect reports from pilots regarding VOR, TACAN, ADF, GPS, or low frequency navigation receivers, impairment of air-ground communications capability, or other equipment deemed appropriate by the pilot (e.g. airborne weather radar). Pilots should communicate the nature and extent of any assistance desired from ATC.

b. Provide the maximum assistance possible consistent with equipment, workload, and any special handling requested.

c. Relay to other controllers or facilities who will subsequently handle the aircraft, all pertinent details concerning the aircraft and any special handling required or being provided.

2-1-8. MINIMUM FUEL

If an aircraft declares a state of "minimum fuel," inform any facility to whom control jurisdiction is transferred of the minimum fuel problem and be alert for any occurrence which might delay the aircraft en route.

NOTE-
Use of the term "minimum fuel" indicates recognition by a pilot that his/her fuel supply has reached a state where, upon reaching destination, he/she cannot accept any undue delay. This is not an emergency situation but merely an advisory that indicates an emergency situation is possible should any undue delay occur. A minimum fuel advisory does not imply a need for traffic priority. Common sense and good judgment will determine the extent of assistance to be given in minimum fuel situations. If, at any time, the remaining usable fuel supply suggests the need for traffic priority to ensure a safe landing, the pilot should declare an emergency and report fuel remaining in minutes.

2-1-9. REPORTING ESSENTIAL FLIGHT INFORMATION

Report as soon as possible to the appropriate FSS, airport manager's office, ARTCC, approach control facility, operations office, or military operations office any information concerning components of the NAS or any flight conditions which may have an adverse effect on air safety.

NOTE-
FSS's are responsible for classifying and disseminating Notices to Airmen.

REFERENCE-
FAAO 7110.65, Timely Information, Para 3-3-3.
FAAO 7110.65, Service Limitations, Para 5-1-6.
FAAO 7210.3, Periodic Maintenance, Para 3-1-2.
USN, See OPNAVINST 3721.30.

2-1-10. NAVAID MALFUNCTIONS

a. When an aircraft reports a ground-based NAVAID malfunction, take the following actions:

1. Request a report from a second aircraft.

2. If the second aircraft reports normal operations, continue use and inform the first aircraft. Record the incident on FAA Form 7230-4 or appropriate military form.

3. If the second aircraft confirms the malfunction or in the absence of a second aircraft report, activate the standby equipment or request the monitor facility to activate.

4. If normal operation is reported after the standby equipment is activated, continue use, record the incident on FAA Form 7230-4 or appropriate military form, and notify Airway Facilities (AF) personnel (the Systems Engineer of the ARTCC when an en route aid is involved).

5. If continued malfunction is reported after the standby equipment is activated or the standby equipment cannot be activated, inform AF personnel and request advice on whether or not the aid should be shut down. In the absence of a second aircraft report, advise the AF personnel of the time of the initial aircraft report and the estimated time a second aircraft report could be obtained.

b. When an aircraft reports a GPS/GNSS anomaly, request the following information and/or take the following actions:

1. Record the following minimum information:

   (a) Aircraft call sign.

   (b) Location.

   (c) Altitude.

   (d) Date/time of occurrence.

2. Direct the aircraft to file a complete report with AFSS/FSS.

3. Broadcast the anomaly report to other aircraft as necessary.

2-1-11. USE OF MARSA

a. MARSA may only be applied to military operations specified in a letter of agreement or other appropriate FAA or military document.

NOTE-
Application of MARSA is a military command prerogative. It will not be invoked indiscriminately by individual units or pilots. It will be used only for IFR operations requiring its use. Commands authorizing MARSA will ensure that its implementation and terms of use are documented and coordinated with the control agency having jurisdiction over the area in which the operations are conducted. Terms of use will assign responsibility and provide for separation among participating aircraft.

b. ATC facilities do not invoke or deny MARSA. Their sole responsibility concerning the use of MARSA is to provide separation between military aircraft engaged in MARSA operations and other nonparticipating IFR aircraft.

c. DOD shall ensure that military pilots requesting special-use airspace/ATCAA's have coordinated with the scheduling agency, have obtained approval for entry, and are familiar with the appropriate MARSA procedures. ATC is not responsible for determining which military aircraft are authorized to enter special-use airspace/ATCAA's.

REFERENCE-
FAAO 7110.65, Military Aerial Refueling, Para 9-3-10.

2-1-12. MILITARY PROCEDURES

Military procedures in the form of additions, modifications, and exceptions to the basic FAA procedure are prescribed herein when a common procedure has not been attained or to fulfill a specific requirement. They shall be applied by:

a. ATC facilities operated by that military service.

EXAMPLE-
1. An Air Force facility providing service for an Air Force base would apply USAF procedures to all traffic regardless of class.

2. A Navy facility providing service for a Naval Air Station would apply USN procedures to all traffic regardless of class.

b. ATC facilities, regardless of their parent organization (FAA, USAF, USN, USA), supporting a designated military airport exclusively. This designation determines which military procedures are to be applied.

EXAMPLE-
1. An FAA facility supports a USAF base exclusively; USAF procedures are applied to all traffic at that base.

2. An FAA facility provides approach control service for a Naval Air Station as well as supporting a civil airport; basic FAA procedures are applied at both locations by the FAA facility.

3. A USAF facility supports a USAF base and provides approach control service to a satellite civilian airport; USAF procedures are applied at both locations by the USAF facility.

REFERENCE-
FAAO 7110.65, Annotations, Para 1-2-5.

c. Other ATC facilities when specified in a letter of agreement.

EXAMPLE-
A USAF unit is using a civil airport supported by an FAA facility- USAF procedures will be applied as specified in a letter of agreement between the unit and the FAA facility to the aircraft of the USAF unit. Basic FAA procedures will be applied to all other aircraft.

2-1-13. FORMATION FLIGHTS

Control formation flights as a single aircraft. When individual control is requested, issue advisory information which will assist the pilots in attaining separation. When pilot reports indicate separation has been established, issue control instructions as required.

NOTE-
1. Separation responsibility between aircraft within the formation during transition to individual control rests with the pilots concerned until standard separation has been attained.

2. Formation join-up and breakaway will be conducted in VFR weather conditions unless prior authorization has been obtained from ATC or individual control has been approved.

REFERENCE-
FAAO 7110.65, Additional Separation for Formation Flights, Para 5-5-8.
P/CG Term- Formation Flight.

2-1-14. COORDINATE USE OF AIRSPACE

a. Ensure that the necessary coordination has been accomplished before you allow an aircraft under your control to enter another controller's area of jurisdiction.

b. Before you issue control instructions directly or relay through another source to an aircraft which is within another controller's area of jurisdiction that will change that aircraft's heading, route, speed, or altitude, ensure that coordination has been accomplished with each of the controllers listed below whose area of jurisdiction is affected by those instructions unless otherwise specified by a letter of agreement or a facility directive:

1. The controller within whose area of jurisdiction the control instructions will be issued.

2. The controller receiving the transfer of control.

3. Any intervening controller(s) through whose area of jurisdiction the aircraft will pass.

c. If you issue control instructions to an aircraft through a source other than another controller (e.g. ARINC, FSS, another pilot) ensure that the necessary coordination has been accomplished with any controllers listed in subparas b1, 2, and 3, whose area of jurisdiction is affected by those instructions unless otherwise specified by a letter of agreement or a facility directive.

REFERENCE-
FAAO 7110.65, Control Transfer, Para 2-1-15.
FAAO 7110.65, Adjacent Airspace, Para 5-5-10.
FAAO 7110.65, Transferring Controller Handoff, Para 5-4-5.
FAAO 7110.65, Receiving Controller Handoff, Para 5-4-6.

2-1-15. CONTROL TRANSFER

a. Transfer control of an aircraft in accordance with the following conditions:

1. At a prescribed or coordinated location, time, fix, or altitude; or,

2. At the time a radar handoff and frequency change to the receiving controller have been completed and when authorized by a facility directive or letter of agreement which specifies the type and extent of control that is transferred.

REFERENCE-
FAAO 7110.65, Coordinate Use of Airspace, Para 2-1-14.
FAAO 7110.65, Transferring Controller Handoff, Para 5-4-5.
FAAO 7110.65, Receiving Controller Handoff, Para 5-4-6.

b. Transfer control of an aircraft only after eliminating any potential conflict with other aircraft for which you have separation responsibility.

c. Assume control of an aircraft only after it is in your area of jurisdiction unless specifically coordinated or as specified by letter of agreement or a facility directive.

2-1-16. SURFACE AREAS

a. Coordinate with the appropriate nonapproach control tower on an individual aircraft basis before issuing a clearance which would require flight within a surface area for which the tower has responsibility unless otherwise specified in a letter of agreement.

REFERENCE-
FAAO 7210.3, Letters of Agreement, Para 4-3-1.
14 CFR Section 91.127, Operating on or in the Vicinity of an Airport in Class E Airspace.
P/CG Term- Surface Area.

b. Coordinate with the appropriate control tower for transit authorization when you are providing radar traffic advisory service to an aircraft that will enter another facility's airspace.

NOTE-
The pilot is not expected to obtain his/her own authorization through each area when in contact with a radar facility.

c. Transfer communications to the appropriate facility, if required, prior to operation within a surface area for which the tower has responsibility.

REFERENCE-
FAAO 7110.65, Radio Communications Transfer, Para 2-1-17.
FAAO 7110.65, Surface Area Restrictions, Para 3-1-11.
FAAO 7110.65, Application, Para 7-6-1.
14 CFR Section 91.129, Operations in Class D Airspace.

2-1-17. RADIO COMMUNICATIONS TRANSFER

a. Transfer radio communications before an aircraft enters the receiving controller's area of jurisdiction unless otherwise coordinated or specified by a letter of agreement or a facility directive.

b. Transfer radio communications by specifying the following:

NOTE-
Radio communications transfer procedures may be specified by a letter of agreement or contained in the route description of an MTR as published in the DOD Planning AP/1B (AP/3).

1. The facility name or location name and terminal function to be contacted. *TERMINAL:* Omit the location name when transferring communications to another controller within your facility; except when instructing the aircraft to change frequency for final approach guidance include the name of the facility.

2. Frequency to use except the following may be omitted:

(a) FSS frequency.

(b) Departure frequency if previously given or published on a DP chart for the procedure issued.

(c) *TERMINAL:*

(1) Ground or local control frequency if in your opinion the pilot knows which frequency is in use.

(2) The numbers preceding the decimal point if the ground control frequency is in the 121 MHz bandwidth.

EXAMPLE-
"Contact Tower."
"Contact Ground."
"Contact Ground Point Seven."
"Contact Ground, One Two Zero Point Eight."
"Contact Huntington Radio."
"Contact Departure."
"Contact Los Angeles Center, One Two Three Point Four."

3. Time, fix, altitude, or specifically when to contact a facility. You may omit this when compliance is expected upon receipt.

NOTE-
AIM, para 5-3-1, ARTCC Communications, informs pilots that they are expected to maintain a listening watch on the transferring controller's frequency until the time, fix, or altitude specified.

PHRASEOLOGY-
CONTACT (facility name or location name and terminal function), (frequency).

If required,

AT (time, fix, or altitude).

c. In situations where an operational advantage will be gained, and following coordination with the receiving controller, you may instruct aircraft on the ground to monitor the receiving controller's frequency.

EXAMPLE-
"Monitor Tower."
"Monitor Ground."
"Monitor Ground Point Seven."
"Monitor Ground, One Two Zero Point Eight."

d. In situations where a sector has multiple frequencies or when sectors are combined using multiple frequencies and the aircraft will remain under your jurisdiction, transfer radio communication by specifying the following:

PHRASEOLOGY-
(Identification) CHANGE TO MY FREQUENCY (state frequency).

EXAMPLE-
"United two twenty-two change to my frequency one two three point four."

REFERENCE-
AIM, Contact Procedures, Para 4-2-3.

e. Avoid issuing a frequency change to helicopters known to be single-piloted during air-taxiing, hovering, or low-level flight. Whenever possible, relay necessary control instructions until the pilot is able to change frequency.

NOTE-
Most light helicopters are flown by one pilot and require the constant use of both hands and feet to maintain control. Although Flight Control Friction Devices assist the pilot, changing frequency near the ground could result in inadvertent ground contact and consequent loss of control. Pilots are expected to advise ATC of their single-pilot status if unable to comply with a frequency change.

REFERENCE-
AIM, Communications, Para 4-3-14.

f. In situations where the controller does not want the pilot to change frequency but the pilot is expecting or may want a frequency change, use the following phraseology.

PHRASEOLOGY-
REMAIN THIS FREQUENCY.

REFERENCE-
FAAO 7110.65, Clearance Information, Para 4-7-1.
FAAO 7110.65, Communication Transfer, Para 5-12-8.

2-1-18. OPERATIONAL REQUESTS

Respond to a request from another controller, a pilot or vehicle operator by one of the following verbal means:

a. Restate the request in complete or abbreviated terms followed by the word "APPROVED." The phraseology "APPROVED AS REQUESTED" may be substituted in lieu of a lengthy readback.

PHRASEOLOGY-
(Requested operation) APPROVED.

or

APPROVED AS REQUESTED.

b. State restrictions followed by the word "APPROVED."

PHRASEOLOGY-
(Restriction and/or additional instructions, requested operation) APPROVED.

c. State the word "UNABLE" and, time permitting, a reason.

PHRASEOLOGY-
UNABLE (requested operation).

and when necessary,

(reason and/or additional instructions.)

d. State the words "STAND BY."

NOTE-
"STAND BY" is not an approval or denial. The controller acknowledges the request and will respond at a later time.

REFERENCE-
FAAO 7110.65, Traffic Advisories, Para 2-1-21.
FAAO 7110.65, Route or Altitude Amendments, Para 4-2-5.
FAAO 7110.65, Methods, Para 7-9-3.

2-1-19. WAKE TURBULENCE

a. Apply wake turbulence procedures to aircraft operating behind heavy jets/B757's and, where indicated, to small aircraft behind large aircraft.

NOTE-
Para 5-5-4, Minima, specifies increased radar separation for small type aircraft landing behind large, heavy, or B757 aircraft because of the possible effects of wake turbulence.

b. The separation minima shall continue to touchdown for all IFR aircraft not making a visual approach or maintaining visual separation.

REFERENCE-
FAAO 7110.65, Approach Separation Responsibility, Para 5-9-5.

2-1-20. WAKE TURBULENCE CAUTIONARY ADVISORIES

a. Issue wake turbulence cautionary advisories and the position, altitude if known, and direction of flight of the heavy jet or B757 to:

REFERENCE-
AC 90-23, Aircraft Wake Turbulence, Pilot Responsibility, Para 12.

1. *TERMINAL.* VFR aircraft not being radar vectored but are behind heavy jets or B757's.

2. IFR aircraft that accept a visual approach or visual separation.

REFERENCE-
FAAO 7110.65, Visual Approach, Para 7-4-1.

3. *TERMINAL.* VFR arriving aircraft that have previously been radar vectored and the vectoring has been discontinued.

b. Issue cautionary information to any aircraft if in your opinion, wake turbulence may have an adverse effect on it. When traffic is known to be a heavy aircraft, include the word *heavy* in the description.

NOTE-
Wake turbulence may be encountered by aircraft in flight as well as when operating on the airport movement area. Because wake turbulence is unpredictable, the controller is not responsible for anticipating its existence or effect. Although not mandatory during ground operations, controllers may use the words jet blast, propwash, or rotorwash, in lieu of wake turbulence, when issuing a caution advisory.

REFERENCE-
AC 90-23, Aircraft Wake Turbulence.
P/CG TERM- Aircraft Classes.
P/CG TERM- Wake Turbulence.

PHRASEOLOGY-
CAUTION WAKE TURBULENCE (traffic information).

REFERENCE-
FAAO 7110.65, Visual Separation, Para 7-2-1.

2-1-21. TRAFFIC ADVISORIES

Unless an aircraft is operating within Class A airspace or omission is requested by the pilot, issue traffic advisories to all aircraft (IFR or VFR) on your frequency when, in your judgment, their proximity may diminish to less than the applicable separation minima. Where no separation minima applies, such as for VFR aircraft outside of Class B/Class C airspace, or a TRSA, issue traffic advisories to those aircraft on your frequency when in your judgment their proximity warrants it. Provide this service as follows:

a. To radar identified aircraft:

1. Azimuth from aircraft in terms of the 12-hour clock, or

2. When rapidly maneuvering aircraft prevent accurate issuance of traffic as in 1 above, specify the direction from an aircraft's position in terms of the eight cardinal compass points (N, NE, E, SE, S, SW, W, and NW). This method shall be terminated at the pilot's request.

3. Distance from aircraft in miles.

4. Direction in which traffic is proceeding and/or relative movement of traffic.

NOTE-
Relative movement includes closing, converging, parallel same direction, opposite direction, diverging, overtaking, crossing left to right, crossing right to left.

5. If known, type of aircraft and altitude.

REFERENCE-
FAAO 7110.65, Description of Aircraft Types, Para 2-4-21.

PHRASEOLOGY-
TRAFFIC, (number) O'CLOCK,

or when appropriate,

(direction) (number) MILES, (direction)-BOUND and/or (relative movement),

and if known,

(type of aircraft and altitude).

or

When appropriate,

(type of aircraft and relative position), (number of feet) FEET ABOVE/BELOW YOU.

If altitude is unknown,

ALTITUDE UNKNOWN.

EXAMPLE-
"Traffic, eleven o'clock, one zero miles, southbound, converging, Boeing Seven Twenty Seven, one seven thousand."
"Traffic, twelve o'clock, one five miles, opposite direction, altitude unknown."
"Traffic, ten o'clock, one two miles, southeast bound, one thousand feet below you."

6. When requested by the pilot, issue radar vectors to assist in avoiding the traffic, provided the aircraft to be vectored is within your area of jurisdiction or coordination has been effected with the sector/facility in whose area the aircraft is operating.

7. If unable to provide vector service, inform the pilot.

REFERENCE-
FAAO 7110.65, Operational Requests, Para 2-1-18.

8. Inform the pilot of the following when traffic you have issued is not reported in sight:

(a) The traffic is no factor.

(b) The traffic is no longer depicted on radar.

PHRASEOLOGY-
TRAFFIC NO FACTOR/NO LONGER OBSERVED,

or

(number) O'CLOCK TRAFFIC NO FACTOR/NO LONGER OBSERVED,

or

(direction) TRAFFIC NO FACTOR/NO LONGER OBSERVED.

b. To aircraft that are not radar identified:

1. Distance and direction from fix.

2. Direction in which traffic is proceeding.

3. If known, type of aircraft and altitude.

4. ETA over the fix the aircraft is approaching, if appropriate.

PHRASEOLOGY-
TRAFFIC, (number) MILES/MINUTES (direction) OF (airport or fix), (direction)-BOUND,

and if known,

(type of aircraft and altitude),

ESTIMATED (fix) (time),

or

TRAFFIC, NUMEROUS AIRCRAFT VICINITY (location).

If altitude is unknown,

ALTITUDE UNKNOWN.

EXAMPLE-
"Traffic, one zero miles east of Forsythe V-O-R, Southbound, M-D Eighty, descending to one six thousand."
"Traffic, reported one zero miles west of Downey V-O-R, northbound, Apache, altitude unknown, estimated Joliet V-O-R one three one five."
"Traffic, eight minutes west of Chicago Heights V-O-R, westbound, Mooney, eight thousand, estimated Joliet V-O-R two zero three five."
"Traffic, numerous aircraft, vicinity of Delia airport."

c. For aircraft displaying Mode C, not radar identified, issue indicated altitude.

EXAMPLE-
"Traffic, one o'clock, six miles, eastbound, altitude indicates six thousand five hundred."

REFERENCE-
FAAO 7110.65, Traffic Information, Para 3-1-6.
FAAO 7110.65, Visual Separation, Para 7-2-1.
FAAO 7110.65, VFR Departure Information, Para 7-6-10.

2-1-22. BIRD ACTIVITY INFORMATION

a. Issue advisory information on pilot-reported, tower-observed, or radar-observed and pilot-verified bird activity. Include position, species or size of birds, if known, course of flight, and altitude. Do this for at least 15 minutes after receipt of such information from pilots or from adjacent facilities unless visual observation or subsequent reports reveal the activity is no longer a factor.

EXAMPLE-
"Flock of geese, one o'clock, seven miles, northbound, last reported at four thousand."
"Flock of small birds, southbound along Mohawk River, last reported at three thousand."
"Numerous flocks of ducks, vicinity Lake Winnebago, altitude unknown."

b. Relay bird activity information to adjacent facilities and to FSS's whenever it appears it will become a factor in their areas.

2-1-23. TRANSFER OF POSITION RESPONSIBILITY

The transfer of position responsibility shall be accomplished in accordance with the "Standard Operating Practice (SOP) for the Transfer of Position Responsibility," and appropriate facility directives each time operational responsibility for a position is transferred from one specialist to another.

2-1-24. WHEELS DOWN CHECK

USA/USAF/USN

Remind aircraft to check wheels down on each approach unless the pilot has previously reported wheels down for that approach.

NOTE-
The intent is solely to remind the pilot to lower the wheels, not to place responsibility on the controller.

a. Tower shall issue the wheels down check at an appropriate place in the pattern.

PHRASEOLOGY-
CHECK WHEELS DOWN.

b. Approach/arrival control, GCA shall issue the wheels down check as follows:

1. To aircraft conducting ASR, PAR, or radar monitored approaches, before the aircraft starts descent on final approach.

2. To aircraft conducting instrument approaches and remaining on the radar facility's frequency, before the aircraft passes the outer marker/final approach fix.

PHRASEOLOGY-
WHEELS SHOULD BE DOWN.

2-1-25. SUPERVISORY NOTIFICATION

Ensure supervisor/controller-in-charge (CIC) is aware of conditions which impact sector/position operations including, but not limited to, the following:

a. Weather.

b. Equipment status.

c. Potential sector overload.

d. Emergency situations.

e. Special flights/operations.

2-1-26. PILOT DEVIATION NOTIFICATION

When it appears that the actions of a pilot constitute a pilot deviation, notify the pilot, workload permitting.

PHRASEOLOGY-

(Identification) POSSIBLE PILOT DEVIATION ADVISE YOU CONTACT (facility) AT (telephone number).

REFERENCE-

FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting, Pilot Deviations, Para 82.

2-1-27. TCAS RESOLUTION ADVISORIES

a. When an aircraft under your control jurisdiction informs you that it is responding to a TCAS Resolution Advisory (RA), do not issue control instructions that are contrary to the RA procedure that a crew member has advised you that they are executing. Provide safety alerts regarding terrain or obstructions and traffic advisories for the aircraft responding to the RA and all other aircraft under your control jurisdiction, as appropriate.

b. Unless advised by other aircraft that they are also responding to a TCAS RA, do not assume that other aircraft in the proximity of the responding aircraft are involved in the RA maneuver or are aware of the responding aircraft's intended maneuvers. Continue to provide control instructions, safety alerts, and traffic advisories as appropriate to such aircraft.

c. Once the responding aircraft has begun a maneuver in response to an RA, the controller is not responsible for providing standard separation between the aircraft that is responding to an RA and any other aircraft, airspace, terrain or obstructions. Responsibility for standard separation resumes when one of the following conditions are met:

1. The responding aircraft has returned to its assigned altitude, or

2. A crew member informs you that the TCAS maneuver is completed and you observe that standard separation has been reestablished, or

3. The responding aircraft has executed an alternate clearance and you observe that standard separation has been reestablished.

NOTE-

1. *AC 120-55A, Air Carrier Operational Approval and Use of TCAS II, suggests pilots use the following phraseology to notify controllers during TCAS events. When a TCAS RA may affect an ATC clearance, inform ATC when beginning the maneuver, or as soon as workload permits.*

EXAMPLE-

1. *"New York Center, United 321, TCAS climb."*

NOTE-

2. *When the RA has been resolved, the flight crew should advise ATC they are returning to their previously assigned clearance or subsequent amended clearance.*

EXAMPLE-

2. *"New York Center, United 321, clear of conflict, returning to assigned altitude."*